

Combined Staff Report

CITY OF SAN BRUNO

DATE: April 4, 2007

TO: Traffic Safety and Parking Committee

FROM: Steven Davis, City Engineer

SUBJECT: Item 3E - Development of TSPC By-laws

BACKGROUND:

At the present time the TSPC has not adopted by-laws. The City Attorney has requested that the TSPC develop and adopt by-ways to further clarify standards and process by which the TSPC will operate.

DISCUSSION:

Attached is a draft set of by-laws that are consistent with by-laws adopted by similar City boards and commissions.

STAFF RECOMMENDATION:

Staff recommends that TSPC members review the draft by-laws and come to the May 2, 2007 meeting prepared to share comments and amendments that would be incorporated into the final by-laws.

DATE PREPARED:

March 29, 2007

ATTACHMENTS:

1. Draft Traffic Safety and Parking Commission By-Laws

TO: Traffic Safety and Parking Committee

FROM: Steven Davis, City Engineer

SUBJECT: Item 3A – Development of Comprehensive Traffic Calming Policy

BACKGROUND:

On February 13, 2007, the City Council received a report on the Cypress Avenue Traffic Calming Pilot Project and requested the TSPC to develop a Comprehensive Traffic Calming Program. Copies of all of the report materials were previously provided to TSPC members.

More specifically, the City Council has requested the TSPC to utilize a public process to draft recommendations to the City Council on a comprehensive approach to addressing neighborhood traffic concerns that would expand the City's and neighborhood's options. Such a comprehensive approach would include a number of options and tools, including education efforts, enhanced enforcement efforts, and engineering efforts. The City Council also requested that the TSPC endeavor to accomplish this task within approximately six months.

DISCUSSION:

At the present time there are a number of pending traffic calming requests that may generally be categorized into the following target neighborhoods:

- 1. Belle Air
- 2. South San Anselmo Avenue
- 3. De Soto Way
- Crestmoor Drive

Based on the evaluation of the Cypress Avenue Traffic Calming Pilot Project, staff believes that the best measures to utilize to evaluate neighborhood traffic impacts are:

- 1. Street Type (Arterial, Collector or Local)
- 2. Average Daily Traffic Volume
- 3. 85th Percentile Speed

Staff proposes the following schedule and work plan for developing a comprehensive traffic calming policy:

April 4, 2007 Meeting

- Approve work plan and schedule
- Review report on Cypress Avenue Traffic Calming Pilot
- Identify appropriate "Measures" for use to identify neighborhood traffic impacts
- Request staff to obtain traffic data "measures" for target neighborhoods.

May 2, 2007 Meeting

Hear Staff Report on progress of traffic data measures collection

Finalize schedule for evaluation of target neighborhoods at June and July meetings

June 6, 2007 & July 11, 2007 Meetings

- Evaluate traffic data measures for each of the four target neighborhoods
- Evaluate options to mitigate traffic impacts in these target neighborhoods
- Develop draft recommendation to City Council for traffic calming measures in each of these four target neighborhoods

August 1, 2007 City Meeting

- Finalized traffic calming recommendation for each target neighborhood
- Identify estimated costs for proposed traffic calming measures
- Define recommended threshold for future neighborhood traffic calming requests

September 11, 2007 City Council Meeting

• Submit Comprehensive Traffic Calming Policy to City Council for consideration

STAFF RECOMMENDATION:

Staff recommends that the TSPC:

- Approve work plan and schedule for development of comprehensive traffic calming policy
- 2. Identify appropriate "Measures" for use to identify neighborhood traffic impacts
- 3. Request staff to obtain traffic data "measures" for target neighborhoods

DATE PREPARED:

March 29, 2007

ATTACHMENTS:

 February 13, 2007 City Council Staff Report on Cypress Avenue Traffic Calming Pilot Project

APWA Traffic Calming Design Guidelines (To be hand delivered at meeting)

TO: Traffic Safety and Parking Committee

FROM: Frans Lind, Principal Civil Engineer

SUBJECT: Item 5B - STOP Signs on Crestmoor Drive at Piedmont Avenue – Response

to Request from Ann Marie Peponis of 160 Piedmont Avenue

BACKGROUND:

Pursuant to section 7.08.040.E.3 of the San Bruno Municipal code, the Transportation Safety and Parking Committee (TSPC) makes recommendations to the City Council regarding intersections where vehicles should be required to stop at one or more entrances, and the City Council has the ability to approve, modify, or deny any such TSPC recommendation.

Staff received a request from a neighborhood resident, Ms. Ann Marie Peponis at 160 Piedmont Avenue, near the intersection of Crestmoor Drive and Piedmont Avenue requesting that the City consider installing STOP signs on Crestmoor Drive at Piedmont Avenue for traffic and pedestrian crossing safety at this intersection. These additional signs would create a three-way stop at the Crestmoor at Piedmont intersection.

The resident stated that while waiting at the Piedmont Avenue STOP sign at Crestmoor Drive, it was difficult to see Crestmoor Drive traffic approaching from the left. This Crestmoor Drive traffic from the left is northbound and often exceeding the speed limit, it is reported. Crestmoor Drive comes to a slight vertical curve crest or slight rise about 100 feet left and south from a waiting Piedmont Drive motorist.

The Piedmont Avenue motorist waiting at the existing STOP sign has a clear view to the right of southbound traffic approaching Piedmont Avenue on a long straight and level section of Crestmoor Drive.

DISCUSSION:

Staff has conducted a clear sight study of the Crestmoor Drive and Piedmont Avenue with results as follows:

 Though the northbound Crestmoor Drive approach to the Piedmont Avenue intersection is somewhat obscured by the slight rise in Crestmoor Drive, it is not sufficient to fully screen approaching traffic approaching from south of the rise. This considers the posted 25 mph speed limit.

STOP signs installed on Crestmoor Drive at Piedmont Avenue must have the following criteria satisfied:

- The traffic volume on Piedmont Avenue must be equal or nearly equal to the volume on Crestmoor Avenue, which it is not, or
- There must be a history of accidents at the intersection, of which there have been none in the past year, or
- There is insufficient stopping sight distance such that, for the 25 mph speed limit on Crestmoor Drive the approaching traffic on that street does not have sufficient stopping distance to stop, if necessary, for the vehicle pulling out from the Piedmont Avenue STOP sign. There is sufficient stopping sight distance, described as follows:

The speed limit is 25 mph on Crestmoor Drive. At this speed, at least 155 feet of continuously clear view of the Piedmont Avenue vehicle must be available to the approaching Crestmoor motorist. For this evaluation an eye height of 3.50 feet is used for the approaching motorist for seeing the object vehicle stopped at Piedmont. The height used for the object vehicle stopped at Piedmont Avenue is 3.50 feet.

STOP signs are intended to assign right-of-way to motorists in an intersection. STOP signs are not intended to slow traffic.

STAFF RECOMMENDATION:

Staff recommends against STOP sign installation on Crestmoor Drive at Piedmont Avenue, where a STOP sign exists. This is based upon the above study criteria.

DATE PREPARED:

March 26, 2007

ATTACHMENTS:

- 1. Plan showing the Crestmoor Drive at Piedmont Avenue intersection
- 2. Photo of intersection

TO: Traffic Safety and Parking Committee

FROM: Frans Lind, Principal Civil Engineer

SUBJECT: Item 3G – Consideration of New Red Curbing No Parking Zone at Angus

Avenue and First Avenue

BACKGROUND:

Pursuant to section 7.08.040.E.3 of the San Bruno Municipal code, the Transportation Safety and Parking Committee (TSPC) makes recommendations to the City Council regarding red curbing, no parking zone, at a street curb are not permitted and the City Council has the ability to approve, modify, or deny any such TSPC recommendation.

Staff received a request from resident, Ms. Lyn Ward at 555 Second Avenue. Ms. Ward has requested that red curbing be painted along the north side of Angus Avenue ranging from the stop bar at the north easterly corner of Angus at First Avenues eastward approximately 100 feet along the northerly Angus Avenue curb. This red curbing is believed to provide a clear sight triangle from where a stop sign is located on westbound Angus Avenue at First Avenue. This sight triangle would provide clear sight of approaching traffic from the right, that is approaching or from the second Angus Avenue at First Avenue intersection. (Angus Avenue is offset by approximately 100 feet at First Avenue.) (Please see Attachment 1.)

An existing heavy truck trailer box without a chassis lies on the ground at the northeast corner of the subject Angus and First Avenue intersection. This trailer was considered in this study. Presently, there is a code enforcement matter pending against the owner of the trailer box, as the trailer box lies within the clear setback from the street required by City Code.

DISCUSSION:

Staff has conducted a field study and has found that the requested red curbing is not justified. A motorist stopped at the stop bar at the above stop sign has clear view to the right of approaching Angus Avenue traffic and of First Avenue traffic stopped at the southbound First Avenue stop sign at the second Angus at First Avenues intersection.

From the above stop bar the sight triangle to the left is also clear.

STAFF RECOMMENDATION:

Staff recommends against red curbing requested for the north side curb of Angus Avenue near the intersection with First Avenue. This is based upon the above study criteria.

DATE PREPARED:

March 30, 2007

ATTACHMENTS:

3. Photo showing the two Angus at First Street intersections.

TO: Traffic Safety and Parking Committee

FROM: Frans Lind, Principal Civil Engineer

SUBJECT: Item 3C - Consideration of Request to Improve Pedestrian Safety at Crosswalk

at Cottonwood Drive near Rollingwood Elementary School

BACKGROUND:

Pursuant to section 7.08.040.E.5 of the San Bruno Municipal code, the Transportation Safety and Parking Committee (TSPC) makes recommendations to the City Council regarding red curbing for safety. The City Council has the ability to approve, modify, or deny any such TSPC recommendation.

Staff received a request dated November 16, 2006 from Ms. Joanna Golts as well as a request dated March 27, 2007 from TSPC Committee Member Doris Maez requesting that the City consider improving the pedestrian safety at the pedestrian crossing at Cottonwood Drive near the Rollingwood Elementary School.

Staff visited the site and observed the following possible clear sight safety concerns at the school crossing:

- 1. A neighbor's hedge
- 2. A vehicle parked curbside in front of the same neighbor's home

The subject orange colored, school crosswalk over Cottonwood is the only marked school crossing of Cottonwood Drive in front of the school. Eastbound Cottonwood Drive traffic approaches the crosswalk on a steep downgrade. Often a pickup, parked curbside near the crosswalk on this approach, obscures clear view of a section of school pedestrians at the southerly end of the crosswalk.

The above hedge near the southerly end of the crosswalk is on the same property as that fronts on the above parked pickup truck. This well trimmed hedge is entirely on the above property and is set back about 6.50 feet from the face of the curb. The top of the hedge has been trimmed from the edge of the hedge to the slope upward and away from the street sidewalk at about a 30 to 45° angle with the horizontal. The edge of the hedge is about 3 feet high. Please, see Attachment 5A.

There have been no reported accidents on Cottonwood Drive in front of the Rollingwood Elementary School to date since January 2006.

DISCUSSION:

Staff has studied the intersection and has found that the curbside parked pickup and other vehicles interferes with the clear sight view by eastbound, Cottonwide Drive motorists approaching the school crosswalk on a downhill grade. The downhill grade makes it harder to stop at the crosswalk.

The hedge was not an obstruction to the clear view by motorists in both directions of pedestrians in the school crosswalk.

The staff study occurred in the afternoon when school was letting out. Vehicles were observed parking on both sides of the northerly end of the crosswalk at the front of the school. These vehicles were occupied by people waiting to pick up students. At times the waiting vehicles encroached into the crosswalk. In both cases on either side of the north end of the crosswalk, the vehicles were parked so close to the crosswalk that they obstructed the clear view of the pedestrians at the north end of the crosswalk. In one case a motorist made an illegal "u" turn over the double yellow street centerline and on top of the crosswalk. This motorist backed up with a student in the crosswalk and behind the motorist.

STAFF RECOMMENDATION:

Recommend that the City Council Approve:

 Paint red curbing on the eastbound, downhill, Cottonwood Drive approach to the school crosswalk. This would consist of two sections of seven feet and fifteen feet broken by a neighbor's driveway. This would prevent the curbside parking of the above pickup and other vehicles.

This would provide a clear view of the southerly end of the school crosswalk by approaching eastbound, downhill motorists.

2. Install two new signs bracketing the crosswalk stating, "No Parking, Stopping or Standing Between Signs" with arrows. One sign would be located about fourteen feet west of the northerly end of the school crosswalk and the other sign would be located about 16 feet east of the crosswalk. These signs would prohibit parking and standing on both sides of the northerly end of the crosswalk.

DATE PREPARED:

March 26, 2007

ATTACHMENTS:

- 1. Plan of Cottonwood Drive street bend in front of the Rollingwood Elementary School and the subject school crosswalk. This plan shows proposed signing and red curb markings.
- 2. Photos of site

TO: Traffic Safety and Parking Committee

FROM: Steven Davis, City Engineer

SUBJECT: Item 3D – Consideration of Interim Grade Crossing Safety Improvements at San

Bruno Avenue, San Mateo Avenue, Scott Street and Angus Avenue

BACKGROUND:

The Peninsula Corridor Joint Powers Board for several years has been working on developing a grade separation project to improve safety of the railroad crossing at San Bruno Avenue. This is a very complex and costly project that is tentatively scheduled for implementation several years in the future. In order to improve the safety at all of the grade crossings in San Bruno as soon as possible, the Joint Powers Board is moving forward with an interim grade crossing safety improvement project that is scheduled to be constructed in the next fiscal year.

The plans for this interim grade crossing safety improvement project are now sufficiently complete for review. The TSPC has the responsibility to evaluate and make recommendations to the City Council regarding railroad crossing improvement projects.

DISCUSSION:

The project generally includes installation of right-of-way fencing at the perimeter of the railroad right-of-way, realignment of the San Mateo Avenue grade crossing to make this crossing closer to a 90-degree crossing, the addition of raised barriers and pedestrian crossing improvements at Scott Street and Angus Avenue. There will also be associated roadway modifications at the intersection of 1st Avenue and San Mateo Avenue and at Huntington Avenue and San Mateo Avenue to accommodate the other proposed roadway and pedestrian changes.

Staff has been working with the design team and commenting on the design as it has developed. In addition, the design team has worked with the grade crossing citizen committee to incorporate citizen input into the design. The project plans are now ready to be reviewed by the TSPC.

STAFF RECOMMENDATION:

The TSPC recommend that the City Council approve the Interim Grade Crossing Safety Improvements project.

DATE PREPARED:

March 29, 2007

ATTACHMENTS:

2. Plans: Selected sheets – Grade Crossing Safety Improvements 65% Submittal

TO: Traffic Safety and Parking Committee

FROM: Frans Lind, Principal Civil Engineer

SUBJECT: Item 3B - Answers to Various Questions Concerning February 7, 2007

Consideration of Traffic Signal at San Bruno Avenue at Sixth Avenue

BACKGROUND:

Staff received a request dated October 10 from neighborhood residents near the intersection of San Bruno Avenue and Sixth Avenue requesting that the City consider installing a traffic signal for traffic and pedestrian crossing safety at this intersection. A number of pedestrian safety concerns of the petitioners about the subject intersection were addressed:

- 1. The pedestrian crosswalks over San Bruno Avenue connect the northwest part of the City with the downtown district and commercial area and schools;
- 2. There is high pedestrian volume crossing San Bruno Avenue, including children;
- 3. There have been several past accidents at this intersection.

On February 7, 2007, the TSPC considered this matter and determined that a traffic signal is not warranted at San Bruno Avenue and Sixth Avenue. During the public testimony a number of follow up questions were referred to staff for preparation of a response.

DISCUSSION:

The following questions were posed at the past February 7, 2007 TSPC meeting in reference to this requested traffic light.

- 1. What is the definition of "Critical Approach Speed"? **Response:** This is the speed at which 85% and below of the motorists drive. The speed limit is based upon this 85% speed with possible reduction to a lower speed limit depending upon further engineering study.
- 2. Under Warrant 3, what was the time period measured to result in 8 pedestrians counted? **Response:** The time period for the pedestrian count was 4pm to 5pm.
- 3. Under Warrant 4, verify the distance to the nearest controlled intersection, as there is a concern that there is no pedestrian crossing at San Bruno Avenue and 101. **Response:** The distance to the nearest controlled intersection of the signal at 3rd and Route 101 is about 750'. There is no pedestrian crossing over San Bruno Avenue at the Caltrans signal at Route 101. Ped heads and push buttons are installed on the signal poles but not energized. There is no pedestrian crosswalk either over San Bruno Avenue or over the Route 101 on-off ramps at the signalized intersection here.

- 4. Under Warrant 5, confirm the distances to the nearest signals. **Response:** The distance to San Bruno Avenue and 101 is 750' and to San Bruno Avenue and 3rd is approximately 750 feet.
- 5. What are the total available points and what was the point total for San Bruno Avenue and Sixth? **Response:** The "numbering of points" does not have significant numerical value. They are a command description in the computer program to allow the data for each warrant in succession to be considered. This is to have the program "step through" each warrant to determine whether or not it is satisfied in favor of a signal or not. They are used to avoid any endless "do" loops in the computer program.
- 6. Working with the Streets Division, look at all markings on San Bruno Avenue from El Camino Real east to Route 101 and identify all items that need refreshing. This should be accomplished by 2/16/07. **Response:** Frans Lind contacted Larry Smurthwaite of the Streets Division. The markings can be refreshed about late May, when the pavement should be dry.
- 7. What is the current status of the maintenance request for the markings and signs on Crestmoor Drive? What is the estimated start and completion date? **Response:** The signs are on order; should be installed in about April 2007; pavement numbers should be installed when the pavement will be dry in late May.
- 8. Since TSPC denied the request for a traffic signal and San Bruno Avenue and 6th, how can the City address the issues of concern, which are:
 - a. Excessive speed of drivers on San Bruno Avenue

Response: 1. Narrow individual lanes

- 2. Push lanes toward curbs on both sides and add 3 ft or more of painted median
- 3. Add bulb outs at intersections (raised planters painted)
- 4. Paint speed limit (25 mph) on pavement and/or add speed limit signs
- 5. Conduct police enforcement
 - 6. Repaint lanes for wave effect
 - 7. Add "your speed is" radar signs
- b. Excessive accident rate at San Bruno Avenue and Sixth Avenue. These accidents may not be the type that can be corrected by a traffic signal

Response: 1. Limit hours of left turns from San Bruno Avenue

- 2. Widen streets for left turn pockets
- 3. Sign streets adjacent to 6th to recommend travel to traffic signal at 3rd Avenue
- c. Significant number of drivers on San Bruno Avenue who turn onto 6th Avenue northbound and drive through the neighborhood to avoid San Bruno Avenue congestion/signal at 3rd.

Response: 1. Limit hours of turning onto 6th Avenue

- 2. Improve the existing signal/streets at 3rd Avenue to reduce any congestion
- d. Significant number of drivers on San Bruno Avenue who turn onto 6th Avenue southbound and drive through the neighborhood to avoid the congestion/signal at 3rd.

Response: 1. Limit hours of turning onto 6th Avenue

2. Improve the existing signal/streets at 3rd Avenue to reduce any congestion

9. Can we request that a police trailer be deployed into the neighborhood near Santa Dominga and South San Anselmo to mitigate the excessive speed of drivers there? **Response**: Frans Lind emailed Marc Catalano on 2/16/07 to request this.

STAFF RECOMMENDATION:

Staff recommends against a traffic signal installation at the San Bruno Avenue at Sixth Avenue intersection based upon the counts and the warrant procedure according to the MUTCD.

DATE PREPARED:

March 26, 2007

ATTACHMENTS: None